

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

FILED

MAR - 6 2012

CLERK, U.S. DISTRICT COURT
By M. Z.
Deputy 1:01 p.m.

GENERAL ELECTRIC COMPANY,

Plaintiff,

v.

MITSUBISHI HEAVY INDUSTRIES,
LTD., and MITSUBISHI POWER SYSTEMS
AMERICAS, INC.,

Defendants.

CIVIL ACTION NO. 3:10-CV-276-F

JURY TRIAL DEMANDED

**DEFENDANTS' MOTION FOR JUDGMENT AS A MATTER OF LAW
OF INVALIDITY OF CLAIM 1 OF U.S. PATENT NO. 7,629,705,
AND BRIEF IN SUPPORT**

Defendants Mitsubishi Heavy Industries, Ltd. and Mitsubishi Power Systems Americas, Inc. (collectively, "Mitsubishi") move under Rule 50(a) of the Federal Rules of Civil Procedure for judgment as a matter of law on Mitsubishi's invalidity claim.¹ The invention of claim 1 of U.S. Patent No. 7,629,705 (the "'705 patent") is invalid under the statutory bar of 35 U.S.C. § 102(b) because it was on sale more than one year before the filing of the application for the '705 patent—i.e., before the critical date of October 20, 2005. Claim 1 is also invalid under §102(b) over International Patent Publication No. WO 2004/070936 to Nielsen ("Nielsen"). Further, claim 1 is invalid under 35 U.S.C. § 112(1) because the '705 patent fails to enable the

¹ Under Rule 50(a)(1), the Court may grant a motion for judgment as a matter of law when "a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue."

full scope of claim 1 or to show that the inventors were in possession of the full scope of the claim when they filed the application for the '705 patent.

I. Invalidity Under the On-Sale Bar

A. Law Applicable to Mitsubishi's Invalidity Claim

To satisfy the "on sale" provision of 35 U.S.C. § 102(b), two points must be shown by clear and convincing evidence. The claimed invention must be:

- (1) the subject of a commercial offer for sale; and
- (2) ready for patenting.

Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 67 (1998). An invention may be proved ready for patenting in two ways: "by proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention."

Pfaff, 525 U.S. at 67.

B. GE's Invention Was the Subject of a Commercial Offer for Sale

In its order denying Mitsubishi's motion for summary judgment on the '705 patent, the Court determined that the first prong of the test for an on-sale bar—i.e., a commercial offer—is established as a matter of law. Docket No. 453 at 8. Thus, the only remaining question is whether the invention of claim 1 was "ready for patenting."

C. GE's Invention was Ready for Patenting

The evidence at trial establishes clearly and convincingly that claim 1 was ready for patenting under both tests established by the Supreme Court in *Pfaff*. The evidence proves that before the critical date, the invention was reduced to practice *and* the inventors had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention. Thus, no reasonable jury would have a legally

sufficient evidentiary basis to find for GE on the issue of validity, and judgment as a matter of law is appropriate.

1. Claim 1 of the '705 Patent was Reduced to Practice Before the Critical Date

Less than two weeks before trial, GE's counsel produced the personal journal of Sidney Barker, a co-inventor of the '705 patent. Mr. Barker's journal describes successful zero-voltage ride-through tests on GE's 2.X MW system on October 14, 2005—six days before the critical date. PTX439 at BARKER000072. Mr. Barker's testimony at trial confirmed the accuracy of his journal—he and his co-inventors “were able to make a few successful ZVRT tests before we went home about 6:30.” Tr. (Afternoon, Feb. 29, 2012) 77:6-17. Mr. Barker contemporaneously recorded his successful ZVRT test in his personal journal.²

Mr. Barker's successful ZVRT test on GE's 2.X MW system proves readiness for patenting because it shows a “reduction to practice before the critical date.” *Pfaff*, 525 U.S. at 67. The evidence presented at trial establishes that the successful ZVRT tests practiced claim 1. *See, e.g.*, Tr. (Afternoon, Feb. 29, 2012) 77:6-17; Tr. (Afternoon, Mar. 1, 2012) 7:10-8:7. Thus, the invention was reduced to practice by no later than October 14, 2005, and therefore was ready for patenting before the critical date.

2. Claim 1 of the '705 Patent was Enabled Before the Critical Date

GE's expert acknowledged that every element of claim 1 was known in the art before the '705 patent was filed except the final limitation relating to zero-voltage ride through. Tr. 107:4-108:12 (Morning, Mar. 1, 2012). The evidence presented at trial establishes by clear and

² Mr. Barker's journal was not available to Mitsubishi when it filed its motion for summary judgment that the '705 patent is invalid (Docket Nos. 378, 379). Thus, Mr. Barker's admission that he had successfully tested his ZVRT solution was unavailable to the Court when it ruled on Mitsubishi's motion.

convincing evidence that the inventors' software and corresponding drawings prepared before the critical date would have enabled a person of ordinary skill to provide the zero-voltage ride through feature and practice claim 1. *See, e.g.*, DTX-8; Tr. (Afternoon, Feb. 29, 2012) 39:9-41:17, 73:16-24, 105:23-106:2; Tr. (Morning, Mar. 5, 2012) 136:15-139:6. The evidence shows that the inventors' disclosures, including both diagrams and functioning software, would have enabled a person having ordinary skill in the art to practice claim 1 of the '705 patent before the critical date.

II. Claim 1 is Anticipated by Nielsen

A claim is invalid as anticipated if each element of the claim is found in a single prior art reference. *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Nielsen was published on August 19, 2004 (DTX-785), and therefore constitutes prior art under § 102(b). The evidence presented at trial proves by clear and convincing evidence that Nielsen satisfies each step of claim 1. *See, e.g.*, Tr. (Afternoon, Mar. 5, 2012) 20:21-24:5. In particular, the evidence establishes that Nielsen discloses configuring an electrical machine and its control system such that the machine remains connected to the grid during and subsequent to a zero-voltage event. *See, e.g.*, Tr. (Afternoon, Mar. 5, 2012) 23:13-24:5.

III. Claim 1 is Invalid for Failing to Enable the Full-Scope of Claim 1

Claim 1 is invalid because it encompasses more than it enables one of ordinary skill in the art to practice. Under 35 U.S.C. § 112, a patent specification must "enable a person of skill in the art to make and use the full scope of the invention without undue experimentation." *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1344-45 (Fed. Cir. 2005).

Based on the evidence presented at trial, no reasonable jury could conclude that the '705 patent enabled the full scope of claim 1. Inventors Einar Larsen and Sidney Barker identified the PLL state machine and/or the use of a fixed frequency during zero-voltage ride through as being

necessary to provide zero-voltage ride through. *See, e.g.*, Tr. (Afternoon, Feb. 29, 2012) 10:7-17, 11:17-31, 69:13-21. GE's expert, Dr. Grady, did not identify any way to practice claim 1 without the use of a fixed frequency, even though claim 1 does not require that feature. *See, e.g.*, Tr. (Morning, Mar. 1, 2012) 57:7-59:10.

IV. Claim 1 is Invalid for Failing to Satisfy the Written Description Requirement

Under 35 U.S.C. § 112, a patent specification must “demonstrate that the patentee possessed the full scope of the invention” at the time the application was filed. *LizardTech*, 424 F.3d at 1344-45. Based on the evidence presented at trial, no reasonable jury could conclude that the '705 patent shows that the inventors were in possession of the full scope of claim 1. As stated above, inventors Einar Larsen and Sidney Barker identified the PLL state machine and/or the use of a fixed frequency during zero-voltage ride through as being necessary to provide zero-voltage ride through—a limitation not required by claim 1. *See, e.g.*, Tr. (Afternoon, Feb. 29, 2012) 10:7-17, 11:17-13:1, 69:13-21. Mr. Larsen's sworn deposition testimony introduced at trial showed that he did not even see how to provide ZVRT without a PLL state machine. *See, e.g.*, Tr. (Afternoon, Feb. 29, 2012) 55:13-56:4.

V. Conclusion

Mitsubishi respectfully requests that the Court dismiss the jury and grant judgment as a matter of law that claim 1 is invalid because Mitsubishi has established the following grounds, and no reasonable juror could find otherwise:

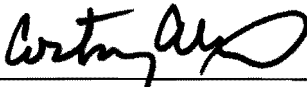
1. Claim 1 is invalid under 35 U.S.C. § 102(b) because it was the subject of a commercial offer for sale and was reduced to practice more than one year before the application for the '705 patent was filed.
2. Claim 1 is invalid under 35 U.S.C. § 102(b) because it was the subject of a commercial offer for sale and the inventors had prepared drawings or other descriptions of the

invention that were sufficiently specific to enable a person skilled in the art to practice the invention.

3. Claim 1 is invalid because it is anticipated by Nielsen.
4. Claim 1 is invalid under 35 U.S.C. § 112(1) because it fails to enable the full scope of the claim.
5. Claim 1 is invalid under 35 U.S.C. § 112(1) because the '705 patent fails to show that the inventors were in possession of the full scope of the claim when the application for the '705 patent was filed.

Dated: March 6, 2012

Respectfully submitted,

By: 

Vic H. Henry

Texas Bar # 09484250

vhhenry@hoaf.com

Lane Fletcher

Texas Bar # 07139300

lanefletcher@hoaf.com

HENRY ODDO AUSTIN & FLETCHER

a Professional Corporation

1700 Pacific Avenue, Suite 2700, Dallas, Texas 75201

Telephone: (214) 658-1900

Facsimile: (214) 658-1919

Roger D. Taylor (admitted *pro hac vice*)

Virginia L. Carron (admitted *pro hac vice*)

Cortney Alexander (admitted *pro hac vice*)

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

3500 SunTrust Plaza,

303 Peachtree Street, N.E., Atlanta, GA 30308-3263

Phone: (404) 653-6400

Facsimile: (404) 653-6444

Thomas H. Jenkins (admitted *pro hac vice*)

Thomas W. Winland (admitted *pro hac vice*)

Naoki Yoshida (admitted *pro hac vice*)

Jeffrey C. Totten (admitted *pro hac vice*)

Tyler M. Akagi (admitted *pro hac vice*)

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

901 New York Avenue, N.W., Washington, D.C. 20001

Phone: (202) 408-4000

Facsimile: (202) 408-4400

ATTORNEYS FOR DEFENDANTS

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing instrument has been served by hand on GE's counsel of record in accordance with the Federal Rules of Civil Procedure on this the 6th day of March 2012.

